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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,464	09/30/2003	Radek Oleksiewicz	D5174-CIP	5551

30409 7590 04/28/2005

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EXAMINER	
SOLIS, ERICK R	
ART UNIT	**PAPER NUMBER**
3747	

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	10/675,464	OLEKSIEWICZ, RADEK	
	Examiner	Art Unit	
	Erick R Solis	3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the wording of the last 4 lines of these claims is confusing and it is unclear as to what applicant is claiming regarding the temperature of the first electronic component and where it needs to fall in order for the pre-cycle warm up to be reduced.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ma in view of either of Izawa et al or Ohsaka et al. Ma teaches an internal combustion engine management system which has a pre-cycle warm up routine for a device such as glow plugs. Ma does not directly sense the temperature of the device to be heated up but rather makes an estimate of temperature based on the elapsed time from engine shutoff to restart. Ma also states in the

background that it is possible to directly sense the device to be heated up but that such temperature sensors are unreliable.

Both of Izawa et al and Ohsaka et al teach an overheat protection circuit which monitors the temperature of a driver (power MOSFET). If the temperature is higher than a predetermined amount the driver is stopped or limited from driving the load device. It would have been obvious to one of ordinary skill in the art to have used a driver temperature monitoring circuit as taught by either of Izawa et al or Ohsaka et al in pre-cycle warm-up device as taught by Ma because this would have provided a safety feauture for preventing the driver from "burning out" due to overheating. Furthermore, whether the temperature sensed is absolute or a differential is considered to be an obvious matter of design choice. The pre cycle warming up of fuel injectors is already known as disclosed by applicant's background of the invention and Ma's device could have been used for pre cycle warm up of injectors.

Response to Arguments

5. Applicant's arguments filed 16 February 2005 have been fully considered but they are not persuasive. In particular, regarding the 35 USC 103 rejection of claims 1-27, as being obvious over Ma in view of either Izawa and Ohsaka, the applicant presents various arguments. Specifically applicant argues that Ma does not teach determining a temperature of a first electronic component and when the temperature of the first electronic component exceeds a temperature condition reducing the pre-cycle warm up of a second electronic component. The examiner agrees with this position, that is why the claims are not rejected under 35 USC 102, but rather under 35 USC 103. Applicant further argues why Izawa, by itself does not teach pre-

cycle warm-up of its load device (2nd electronic component) and makes a similar argument regarding the Ohsaka reference. These arguments are not persuasive because it is the combination of Ma and Izawa and/or Ohsaka which apply to the rejected claims. The motivation for combining the references is that by using a protective arrangement for protecting the driver (1st electronic component) of the load device (2nd electronic component) as taught by either of Izawa and Ohsaka it would prevent the driver (1st electronic component) from burning out due to overheating and also as a result also protect the load device which if applied to Ma would be the glow plugs and would result in a reduced pre-cycle warm-up time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick R Solis whose telephone number is (571) 272-4853. The examiner can normally be reached on Monday-Thursday.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Erick R. Solis
Erick R Solis
Primary Examiner
Art Unit 3747

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April 26, 2005